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EXAMINER

CASCA, FRED A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/674,902	Applicant(s) CURCIO ET AL.	
	Examiner Fred A. Casca	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 15 and 17-33 is/are rejected.
- 7) ☒ Claim(s) 13 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment filed on April 30, 2007. Claims 1-33 are still pending in the present application. **This Action is made FINAL.**

Applicant's arguments and amendments with the rejection of claims 24-25 under 35 USC § 101 are persuasive. Therefore, the rejection of claims under 35 USC § 101 is withdrawn.

Applicant's arguments with reference to the objection of claims 18-20 due to multiple dependencies are persuasive. Therefore the objection of claims 18-20 is withdrawn.

The submission of a new title has been acknowledged. The objection of title due to not being descriptive has been withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7-12, 14-15, 17-25 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugirtharaj (WO 01/30090 A2) in view of Yuen (US Patent No. 2003/0185286 A1).

Referring to claim 1, Sugirtharaj discloses a method (page 1, lines 7-20, "wireless transmission of data", "GPRS") comprising:

receiving streaming media in a client device from a streaming server over an air interface (page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20), the streaming server to send streaming media which the mobile client device is not able to receive due to a cell reselection (page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20, "If a loss occurs, or if there are bit errors during transmission, such loss sensitive data must be re-transmitted", "buffers that temporarily store packets of data", "The stored data is then available for transmission to the mobile station", note that data that was lost due cell reselection (handoff) is stored in a buffer and to be transmitted to the mobile station).

Sugirtharaj does not specifically disclose detecting a cell reselection event in the mobile client device, and in response to the detected cell reselection requesting the server to send, as claimed by applicant.

Yuen discloses cell reselection (handoff) and the process of requesting transmission of stored data in response to a handoff completion (abstract, paragraphs 174, "In response to handoff completion, transmitting means transmits the stored data to the second base station").

It would have been obvious to one of the ordinary skills in the art at the time of invention to modify the method of Sugirtharaj by incorporating the teachings of English into that of Sugirtharaj, as claim by applicant, for the purpose of identifying, requesting and transmitting the missing data as requested so that only missing or corrupted data is retransmitted without delay, and consequently providing an efficient communication during cell selection events.

Referring to claim 2, the combinations of Sugirtharaj/Yuen disclose a method according to claim 1, and further disclose the streaming server is provided with a starting point at which to start sending the requested streaming media (Sugirtharaj, page 2, lines 6-15).

Referring to claim 3, the combinations of Sugirtharaj/Yuen disclose a method according to claim 1, and further disclose streaming server sends the streaming media which the mobile client device is not able to receive due to said cell reselection as well as a remaining portion of streaming media in response to the request (Sugirtharaj, page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20, and English, paragraph 71, see rejection of claim 1 above please).

Referring to claim 4, the combinations of Sugirtharaj/Yuen disclose a method according to claim 1, and further disclose the cell reselection comprises a cell reselection period during which the mobile client device is not able to receive streaming media (Sugirtharaj, page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20, "If a loss occurs, or if there are bit errors during transmission, such loss sensitive data must be re-transmitted), and further disclose ending from the mobile client device to the streaming server, after the cell reselection period, a resending request which requests the streaming server to resend streaming media which the mobile client device was not able to receive during the cell reselection period (see rejection of claim 1 above please).

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Referring to claim 7, the combinations of Sugirtharaj/Yuen disclose a method according to claim 1, and further disclose the streaming media is temporarily stored in a temporary store, such as a buffer, at the client device (Sugirtharaj, page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20).

Referring to claim 8, the combinations of Sugirtharaj/Yuen disclose a method according to claim 7.

The combinations of Sugirtharaj/Yuen do not disclose the temporary store has a size longer in time than a cell reselection period.

It would have been obvious design choice to modify the combo by limiting the temporary store to have a size longer in time than a cell reselection period, since applicant has not disclosed that doing so solves any stated problems or is for any particular purpose.

Referring to claim 9, the combinations of Sugirtharaj/Yuen disclose a method according to claim 7.

The combinations of Sugirtharaj/Yuen do not disclose streaming media at a rate higher than the playing rate of that media.

It would have been obvious design choice to modify the combo by setting streaming media at a rate higher than the playing rate of that media, since applicant has not disclosed that doing so solves any stated problems or is for any particular purpose.

Referring to claim 10, the combinations of Sugirtharaj/Yuen disclose a method according to claim 9, and further disclose a bandwidth or desired transmission bit rate with speeding factor is communicated to the streaming server in a request (page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20, note that media is inherently transmitted with a desired transmission so that it is received properly).

Referring to 11, the combinations of Sugirtharaj/Yuen disclose a method according to claim 9.

The combinations of Sugirtharaj/Yuen do not disclose streaming media is stored at the mobile client device at a rate higher than the playing rate.

It would have been obvious design choice to modify the method Sugirtharaj/Yuen by setting streaming media to be stored at the mobile client device at a rate higher than the playing rate, since applicant has not disclosed that doing so solves any stated problems or is for any particular purpose.

Referring to claim 12, the combinations of Sugirtharaj/Yuen disclose a method according to claim 9, and further disclose the streaming server is subsequently requested to resume an original configuration (Sugirtharaj, page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20).

Referring to claim 14, the combinations of Sugirtharaj/Yuen disclose a method according to claim 1, and further disclose the streaming server has a set of media streams available for

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transmission in which the same media content has been encoded at different bit rates (see rejection of claims 8-9 please).

Referring to claim 15, the combinations of Sugirtharaj/Yuen disclose a method according to claim 14, and further disclose information on the available set of media streams is beforehand communicated to the mobile client device in a streaming session setup (Sugirtharaj, page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20).

Referring to claim 17, the combinations of Sugirtharaj/Yuen disclose a method according to claim 1, and further the streaming media comprise one of the following: a video stream, an audio stream, another stream of single media, a multimedia stream (Sugirtharaj, page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20).

Referring to claim 18, the combinations of Sugirtharaj/Yuen disclose a method according to claim 1, and further disclose the streaming server sends streaming media to the mobile client device via a mobile communications network (Sugirtharaj, page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20).

Referring to claim 19, the combinations of Sugirtharaj/Yuen disclose a method according to claim 1, and further disclose the mobile communications network comprises a mobile packet radio network, such as a general packet radio service network (Sugirtharaj, page 1, lines 15-26, page 2, lines 4-15 and page 3, lines 16-20).

Referring to claim 20, the combinations of Sugirtharaj/Yuen disclose a method according to claim 1, and further disclose cell reselection is performed between two base stations which are selected from a group comprising: base stations belonging to a general packet radio service system, base stations belonging to a third generation mobile communications system (Sugirtharaj, page 1, lines 15-26, page 2, lines 4-15 and page 3, lines 16-20).

Referring to claims 21-25, claims 21, 22, 23, 24 and 25 defines a mobile client device, a streaming server, a system and computer programs reciting features analogous to the features of the method defined by claim 1 (as rejected above). Thus, the combinations of Sugirtharaj/Yuen disclose all elements of claims 21-25 (please see the rejection of claim 1 above).

Referring to claims 26-31, claims 26-31 defines a mobile client device and a streaming server, a system reciting features analogous to the features of the method defined by claims 2, 45, 7, 9 and 9 (as rejected above) respectively. Thus, the combinations of Sugirtharaj/Yuen disclose all elements of claims 26-31 (please see the rejection of claim 1 above).

Referring to claim 32, the combination of Sugirtharaj/Yuen disclose a streaming server according to claim 22 and further disclose the streaming server comprises a memory for storing a set of media streams which are available for transmission in which the same media content has been encoded at different bit rates (Sugirtharaj, page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20, and figures 5-6).

Referring to claim 33, the combination of Sugirtharaj/Yuen disclose a streaming server according to claim 22 and further disclose the streaming server is configured to communicate information on the available set of media streams beforehand to the mobile client device in a streaming session setup (Sugirtharaj, page 1, lines 25-26, page 2, lines 4-15 and page 3, lines 16-20, and figures 5-6).

4. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugirtharaj (WO 01/30090 A2) Yuen (US 2003/0185286 A1) and still further in view of Cranor et al (2003/0112792 A1).

Referring to claim 5, the combinations of Sugirtharaj/Yuen disclose a method according to claim 4.

The combination of Sugirtharaj/Yuen does not disclose resending request is generated according to RTSP protocol (Real Time Streaming Protocol).

However RTSP protocol is well known in art as explained in RFC 2326 as a protocol for use in streaming media. And further, Cranor discloses RTCP in a retransmission scheme (paragraph 53).

It would have been obvious to one of the ordinary skills in the art at the time of the invention to modify the combo by incorporating the teachings of Cranor for the purpose of

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allowing a client to remotely control the streaming media server, issuing VCR-like commands such as “play” and “pause”, as RTSP allows doing so.

Referring to claim 6, the combinations of Sugirtharaj/Yuen disclose a method according to claim 4.

The combination of Sugirtharaj/Yuen does not disclose the resending request is implemented by an RTSP PAUSE/PLAY message pair.

Cranor discloses resending request is implemented by an RTSP PAUSE/PLAY message pair (par 53, please see the rejection of claim 5 above).

It would have been obvious to one of the ordinary skills in the art at the time of the invention to modify the method of Sugirtharaj/Yuen by incorporating the teachings of Cranor for the purpose of allowing a client to remotely control the streaming media server.

Allowable Subject Matter

5. Claims 13 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-13, 14-15 and 17-33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached at (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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